

What Is Claimed Is:

005280-21694900
09648947-082500

1 1. A test unit for an aircraft cabin telephony system, comprising:
2 a pair of connectors for inserting the test unit in-line within the system;
3 an AC voltage module operative to indicate the presence of an AC voltage
4 when the test unit is connected to the Cabin Delivery System connector of the
5 cabin telephony system;
6 a signal module operative to detect the presence of data signals when the
7 test unit is connected to the Cabin Delivery System connector;
8 a DC power module operative to indicate the presence of DC voltage when
9 the test unit is connected to a seat telephony box within the cabin telephony
10 system; and
11 an AC current module operative to detect an over-current condition when
12 the test unit is connected to the Cabin Delivery System connector of the cabin
13 telephony system.

1 2. The test unit of claim 1, further comprising:
2 a relay bank operative to selectively couple the AC voltage module, signal
3 module, and DC power module to the pair of connectors as a function of the AC
4 voltage present on the connectors.

1 3. The test unit of claim 2, wherein the signal module comprises
2 means for detecting the presence of E1 signals.

1 4. The test unit of claim 3, wherein the AC voltage module
2 comprises:
3 an AC voltage detect unit having
4 a window comparator, and
5 a current source coupled to the comparator.

1 5. The test unit of claim 4, wherein the signal module comprises:
2 an inbound E1 signal module configured to detect the presence of inbound
3 E1 signals; and
4 an outbound E1 signal module configured to detect the presence of
5 outbound E1 signals.

1 6. The test unit of claim 5, wherein each of the E1 signal modules
2 comprises:
3 a monostable multivibrator configured to lengthen the duration of the
4 pulses of the E1 signal.

add a π

005280 4468496